

the grey margins of the secondaries are more apparent on the wings, and the tail-feathers are somewhat darker. The measurements compared with those of two adult examples of *R. titys* are given above (p. 583).

The comparison of the sternum of the two species has shown differences far greater than I ever expected to find in members of the same genus, especially in a "compact" genus such as *Ruticilla*, in which the species are so closely allied.

Thus, in *R. titys* the pectoral arch is more robust in its general characters, for, in both sterna of *R. nigra*, we observe the more slender and less curved *clavicles*, and the shorter and thinner *scapulæ*; the *coracoids* are, however, decidedly longer than in *R. titys*, but have a less prominent crest. The *sternum* is narrower than in the latter species and longer, the difference being quite a millimetre; finally, the *pre-sternum* or *manubrium* is also larger in *Ruticilla nigra* and the *episternal apophyses* are larger and more slender. On the whole, we may say that the sternum is more robust in *R. titys*, slighter and more slender in *R. nigra*.

XLII.—*A Contribution to our Knowledge of the Birds occurring in the Southern Shan States, Upper Burma.* By Lt.-Col. C. T. BINGHAM.

(Plates XI. & XII.)

IN the 'Journal of the Asiatic Society of Bengal,' vol. lxxix. pt. ii. (1900), Mr. H. N. Thompson, Deputy-Conservator of Forests, and I gave a list of the birds collected or observed by us during a short tour we made in the Southern Shan States, Upper Burma. Since my return to England, Mr. Thompson has continued collecting and in company with Mr. W. H. Craddock, also of the Forest Department, who has materially assisted him, has visited various parts of the same States, including the remote and little-known valley of the Mékong, and the high ranges, rising to 8000 or 9000 ft., between that valley and the Salween. Messrs. Thompson and Craddock have been good enough to forward their collection to me. It contains examples of many species not seen or

obtained by Mr. Thompson and myself previously, including two new species of *Suthora* and a *Urocichla* very distinct from the two forms recorded respectively from Sikhim and the hills of Assam. In addition, a number of species that were obtained by us on Loi San Pa, in the Mōng Kōng State, are recorded over a wide range from Byinkyi Mountain, close to the border of the Pyinmana district in the west, to the Mékong Valley on the eastern frontier of the States.

The area in which this collection was made may be roughly said to extend from 18° to 21° N. lat., and from 97° to 99° 30' E. long., though only an occasional place, generally a high mountain, was actually investigated over this vast extent of country.

My best thanks are due to Messrs. Thompson and Craddock for kindly entrusting me with their collection, and to Dr. R. Bowdler Sharpe for great assistance in the identification of the specimens.

The species not included in the list given in the 'Journal of the Asiatic Society of Bengal,' mentioned above, are marked with an asterisk. The numbers in parentheses refer to the 'Fauna of British India: Birds.'

Family CORVIDÆ.

1 (25). *GARRULUS LEUCOTIS* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 39.

Pang Paw, 4000 ft., 8.11.01. Ranges up to 6000 ft.

2 (32). *PARUS MINOR* Temm. & Schleg.

Oates, Faun. Brit. Ind., Birds, i. p. 48.

Loi Maw, 6000 ft., 5.4.02. Differs from specimens previously procured at Kalaw and Loi San Pa, and is identical with those from Tenasserim so far as the extent of the green on the neck is concerned.

*3. *ÆGITHALISCUS PULCHELLUS* Rippon.

Rippon, Bull. B. O. C. xi. p. 11 (1900); Ibis, 1901, p. 528, pl. xi. fig. 2.

Ménétaung, 6000 ft., 26.1.02; Loi Un, Loi Sali range, 10.1.01. Numerous specimens.

4 (41). *MACHLOLOPHUS SPILONOTUS* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 54.

Loi Un, Loi Sali range, 5000 to 7000 ft., 7.1.01. Numerous specimens.

5 (52). *PARADOXORNIS GUTTATICOLLIS* A. David.

Loi Moheng, 7000 ft., 26.1.02.

Ordinarily this bird is found in high grass and reeds, but Mr. Craddock notes that the specimen sent was shot in dense evergreen jungle.

*6. *SUTHORA THOMPSONI*. (Plate XI. fig. 2.)

Suthora thompsoni Bingham, Bull. B. O. C. xiii. p. 63 (1903).

“♀. Resembles *S. davidiana* Slater, from Fohkien, but is distinctly smaller and differs in the points noted below. Forehead, crown, sides of the head, and nape chestnut, of a much deeper colour than in *S. davidiana*, and not, as in that species, extending to the upper back, the chestnut colour being somewhat paler along the posterior margin of the nape; back, rump, and wing-coverts clear, rather dark, ashy grey; wings brown, primaries and secondaries with narrow outer margins of light chestnut; upper tail-coverts and outer webs of the tail-feathers chestnut, of a lighter shade than the colour of the head, inner webs of tail-feathers brown; chin and throat uniform deep black, without the white spots so conspicuous in *S. davidiana*; upper breast albescent; lower tail-coverts and tail beneath ochraceous. Bill (in the skin) yellow, (in the flesh) ‘fleshy pink; irides reddish brown; legs and feet fleshy yellow’ (*Craddock*).

“Length, ♀, 3·7”–3·8”, wing 2·1”, tail 1·45”, bill from gape 0·3”, tarsus 0·65”.”

Kyatpyin, Paunglaung, 2500 ft., Loilong State, 18.3.02.

*7. *SUTHORA CRADDOCKI*. (Plate XI. fig. 1.)

Suthora craddocki Bingham, Bull. B. O. C. xiii. p. 54 (1903).

“♂. Forehead, crown, nape, back, rump, and upper tail-coverts orange-brown, shaded on the nape and back with olive-brown; wings brown, the primaries edged externally



Illustrations of the birds.

Miner Bros. imp

SPARROW CRADDOCKI
SPARROW THOMPSONI

with white, the secondaries all broadly edged with bright orange-brown; the primary-coverts brown, forming a conspicuous patch on the upper portion of the wing; tail brown, the outer webs of the feathers bright orange-brown for three-fourths of their length from base; lores, cheeks, and a long supercilium white, the white of the cheeks extending to the neck; ear-coverts brown; chin and throat black, shading into grey on the upper breast; abdomen and under tail-coverts bright orange-brown, flanks anteriorly more or less white: upper mandible horny, lower mandible fleshy yellow; legs and feet in life apparently fleshy brown.

“Length about 4", wing 1 8", tail 1·9", bill from gape 0·3", tarsus 0·7".”

Valley of the Mékong River at 8500 ft., April 1902.

*8 (61). *SCÆORHYNCHUS GULARIS* (Horsf.).

Oates, Faun. Brit. Ind., Birds, i. p. 69.

Byinkyi, Loilong State, 4500 ft., 10.3.02. ♂. “Length in the flesh 7·5". Iris reddish brown, legs dull green.”

Family CRATEROPODIDÆ.

9 (64). *DRYONASTES CHINENSIS* (Scop.).

Oates, Faun. Brit. Ind., Birds, i. p. 74.

Wanhat, Cis-Salween, Mawkmai, 1200 ft., 3.1.01.

I never found this bird common, though it occurs over a wide range, and at elevations from 500 ft. to 5000 ft.

10 (67). *DRYONASTES SANNIO* (Swinhoe).

Oates, Faun. Brit. Ind., Birds, i. p. 76.

Ménétaung, 6000 ft., 20.1.02; Loi Kaw, 4500 ft., 8.4.02.

*11 (71). *GARRULAX DIARDI* (Less.).

Oates, Faun. Brit. Ind., Birds, i. p. 79.

Pan Long, Wanhat Circle, Cis-Salween, Mawkmai, 1200 to 1500 ft., 3.1.02. Four specimens.

12 (72). *GARRULAX PECTORALIS* (Gould).

Oates, Faun. Brit. Ind., Birds, i. p. 80.

Loi Salii range, 5600 ft., 5.1.01. Has a wide range, and occurs plentifully both in the low hot valleys and at heights up to 6000 ft.

13 (86). *TROCHALOPTERUM MELANOSTIGMA* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 92.

Yengyi Palaung, 5000 ft., 11.1.02; Loi Maw, 6000 ft., 4.4.02; Loi Pangnaw, west of the Mékong, 8400 ft., April 1902. ♀ ♂.

This species seems to vary very much in the colour of the under parts and of the tail. The specimen from Loi Maw has the "ferruginous" or reddish-brown colour of the throat extending to the breast and faintly over the abdomen, the tail being dark greyish brown, its margins washed with green. Among the Mékong specimens, on the contrary, some have only the throat reddish brown, others have that colour extending to the upper breast; while the tail in all is green or dark greyish brown, washed all over, and not only on the margins, with green. Quite recently, also, Mr. Craddock, who is now in Pahang, Malay Federated States, has kindly sent me a specimen of this bird which has the whole of the under parts from the chin to the under tail-coverts very dark ferruginous brown, the tail brown above washed with olive-yellow, and black beneath.

14. *TROCHALOPTERUM RIPPONI* Oates.

Oates, Bull. B. O. C. xi. p. 10 (1900); Ibis, 1901, p. 529, pl. xi. fig. 1.

Ménétauang range, Loilong State, 5000 to 6000 ft., 23.1.02.

Trocnalopteron ripponi is a race of *T. phæniceum* (Gould), under which name I recorded it in my previous paper on the birds of the Shan States. I there, however, drew attention to the differences between it and true *T. phæniceum*.

*15 (117). *POMATORHINUS NUCHALIS* Tweed.

Oates, Faun. Brit. Ind., Birds, i. p. 117.

Kanlaung chaung, Loilong State, 1000 ft., 19.3.02; south of Homam, Mawmai State, 4500 ft., 14.5.02; Kalaw, 4200 feet, 22.1.02; Pyaunggaung, 2500 ft., Dec. 1900. ♂ ♂ ♀.

These examples, though not typical, agree best both with the description and with the type specimen of *P. nuchalis* Tweeddale. This is a most puzzling bird, varying greatly

in total length, in size of bill, and in the depth and amount of chestnut or brown streaks on the sides of the neck and upper breast. The total length varies in the six specimens from 7.1" to 9.5", the bill from the gape from 0.98" to 1.2".

*16 (126). *POMATORHINUS OCHRACEICEPS* Wald.

Oates, Faun. Brit. Ind., Birds, i. p. 123.

Byinkyi, 5000 ft., 10.3.02.

17 (129 a). *POMATORHINUS IMBERBIS* Salv.

Oates, Faun. Brit. Ind., Birds, iv., App. p. 479.

Loi Maw, 5000 ft., 4.4.02; Yengyi Palaung, 5200 ft., 11.1.02.

18 (145). *PELLORNEUM SUBOCHRACEUM* Swinh.

Oates, Faun. Brit. Ind., Birds, i. p. 142.

Taunggyi, 5000 ft., 6.8.1900; Thaton State, 3000 ft., 29.3.02.

19 (151). *DRYMCATAPHUS TICKELLI* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 146.

♀. Hlwegyi chaung, Loilong State, 2000 ft., 11.3.02.

20. *DRYMCATAPHUS CINNAMOMEUS* Rippon.

Drymcataphus cinnamomeus Rippon, Bull. B. O. C. xi. p. 12 (1900).

Kaungpo, Ménétaung, 6000 ft., 26.1.02.

21 (153). *CORYTHOCICHLA BREVICAUDATA* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 148.

Taunggyi, 5000 ft., 1.7.1900; Byinkyi, Loilong State, 5000 ft.; Kalaw, 4000 ft., 15.2.02; Loi Maw, 4500 ft., 7.4.02; Pinlikun, Loilong State, 23.3.02.

*22 (165). *ALCIPPE PHAYRII* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 158.

Yatsawk, 2000 ft., 10.12.01; Ménétaung, 5500 ft., 20.1.02; Pyaunggaung, 4000 ft., 1.12.1900.

The specimens seem to me intermediate between typical *A. phayrii*, such as I was familiar with in Tenasserim, and the recently described *A. fratercula* of Rippon (Bull. B. O. C. xi. p. 11, 1900).

*23 (169). *STACHYRIS NIGRICEPS* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 162.

♂. Kanlaung chaung, Loilong State, 1000 ft., 19.3.02.

*24 (171). *STACHYRIS ASSIMILIS* Wald.

Oates, Faun. Brit. Ind., Birds, i. p. 163.

Byinkyi, Loilong State, 5500 ft., 9.3.02, ♂; Loi Pang Naw, near the Mékong River, 6500 ft., April 1902.

25 (176). *MIXORNIS RUBRICAPILLUS* (Tick.).

Oates, Faun. Brit. Ind., Birds, i. p. 167.

Mawkmai State, 3000 ft., 21.5.02.

26 (182). *SITTIPARUS CASTANEICEPS* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, i. p. 172.

Ménétaung, 6000 ft., 26.1.02; Loi Un, Loi Sali range, 5500 ft., 6.1.01; Loi Maw, 6000 ft., 3.4.02; Loilong State, 5500 ft., 26.3.02.

I have never seen this pretty little Tit-Babbler under an elevation of 5000 ft.

27 (188). *MYIOPHONEUS EUGENII* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 179.

Hwè Heng, Mong Hta, 3000 ft.

*28 (197). *DRYMOCHARES CRURALIS* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 188.

Ménétaung, 6000 ft., 9.1.02.

*29 (201). *TESIA CYANIVENTRIS* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 192.

Mékong Valley, 2000 ft., 10.1.02.

30 (203). *SIBIA PICAOIDES* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 195.

Loi Pang Naw, 7500 ft., April 1902.

31 (208). *LIOPTILA ANNECTENS* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 199.

Ménétaung, 5500 ft., 23.1.02.

*32 (218). *STAPHIDIA STRIATA* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 206.

♀. Byinkyi, 5500 ft., 10.3.02.

Four specimens of this rare bird were obtained by Mr. Craddock; one a female, with nest and eggs. "Nest of moss lined with fibres placed on road-cutting near Byinkyi, 5500 ft." The eggs are broad ovals, $0.7'' \times 0.55''$ and $0.71'' \times 0.55''$, white, with a faint wash of pale blue, spotted thickly at the broad end, where the markings are more or less confluent, with brown and purple.

*33 (220). *SIVA CASTANEICAUDA* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 209.

Loi Pang Naw, 8000 ft., west of the Mèkong, April 1902. Several specimens.

*34 (227). *ZOSTEROPS AUREIVENTER* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 215.

Ménétaung, 6000 ft., 13.1.02.

Zosterops simplex Swinh., so common at Kalaw and on Loi San Pa, seems not to have been obtained in the Mèkong valley.

*35 (232). *IXULUS FLAVICOLLIS* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, i. p. 218.

Loi Pang Naw, from 6500 to 8000 ft., April 1902. Several specimens.

*36 (233 a). *IXULUS CLARKI* Oates.

♀. Byinkyi, 5500 ft., Loilong State, 9.1.02.

*37 (234). *HERPORNIS XANTHOLEUCA* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 219.

The locality is not given, but the bird was probably procured in one of the low hot valleys.

38 (236). *CUTIA NEPALENSIS* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 222.

Ménétaung, 6000 ft., 3.1.02; Loi Maw, 6000 ft., 3.4.02. Two pairs.

*39 (237). *PTERUTHIUS ERYTHROPTERUS* (Vigors).

Oates, Faun. Brit. Ind., Birds, i. p. 224.

♂♂. Loi Un, Loi Sali range, 6000 ft., 3.4.02.

40 (238). *PTERUTHIUS AERIALATUS* Tick.

Oates, Faun. Brit. Ind., Birds, i. p. 225.

Loi Sali range, 5400 ft., 5.1.01; Yengyi Palaung, 5200 ft., 10.1.02.

*41 (239). *PTERUTHIUS MELANOTIS* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 226.

Loi Pang Naw, west of the Mekong, 8000 ft., April 1902.
A pair.

42 (243). *ÆGITHINA TIPHIA* (Linn.).

Oates, Faun. Brit. Ind., Birds, i. p. 230.

Thaton State, 4000 ft., 27.4.02.

43 (249). *CHLOROPSIS HARDWICKII* Jard. & Selby.

Oates, Faun. Brit. Ind., Birds, i. p. 236.

Panghi, Loi Sali range, 4200 ft., 4.1.01; Loi Maw, 4000 ft., 8.4.02; Ménétaung, 6500 ft., 26.1.02.

44 (257). *MESIA ARGENTAUROS* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 244.

Byinkyi, 5500 ft., 8.3.02.

45 (261). *PSAROGLOSSA SPILOPTERA* (Vigors).

Oates, Faun. Brit. Ind., Birds, i. p. 249.

Yengyi Palaung, 5200 ft., 4.1.02.

*46 (264). *CRINIGER BURMANICUS* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 256.

Mawkmai State, 2000 ft., 15.4.02.

47 (270). *HYPSIPETES CONCOLOR* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 261.

Ménétaung range, 6500 ft., 27.1.02; Loi Kaw, 4500 ft., 8.4.02.

48. *CERASOPHILA THOMPSONI*. (Plate XII.)

Cerasophila thompsoni Bingham, Ann. & Mag. Nat. Hist.

(7) v. 1900, p. 358.

♂ ♀. "The whole head and neck snow-white, the white of these parts abruptly defined from the colour of the back and breast, but extending further down on the upper back than on the sides of the neck and breast; the back, rump,



W. A. Rehn, del. et lith.

Mintern Bros. imp.

CERYLE THOMPSONI

upper tail-coverts, wing-coverts, scapulars, the outer webs of the two inner secondaries, the breast, sides, and abdomen clear ash-grey; the primaries, secondaries (with the exception noted above), and the tail hair-brown; the vent and under tail-coverts light bright chestnut; the under wing-coverts and axillaries, the lower portion of the abdomen, and some of the lower feathers on the thighs pale grey with a wash of light chestnut. Bill, legs, and feet coral-red; claws horny; a bare patch of skin round the eyes, conspicuously wider below the eye than above it. greyish, tinged with yellow, the eyelids with a rim of bright vermilion-red; iris whitish yellow to pale yellow.

"The sexes are alike in plumage, and differ only very slightly in size. Dimensions in the flesh:—

"♂. Length 7·8", wing 3·8", tail 3·8", tarsus 0·7", bill from gape 0·85".

"♀. Length 7·8", wing 3·7", tail 3·85", tarsus 0·7", bill from gape 0·85"."

Kaunghpo, Ménétaung range, 6000 ft., 25.1.02.

It is remarkable that this conspicuous bird was not obtained on the high range dividing the Salween and Mékong valleys. It was procured first on Loi San Pa at and above 6000 ft.; Col. Rippon obtained it from Na Noi; and Mr. Craddock has now sent it from the high hills in the west of the Shan States.

*49 (274). *HEMIXUS HILDEBRANDI* Hume.

Oates, Faun. Brit. Ind., Birds, i. p. 264.

Foot of watershed between Mông Kyat and Mông Hang, 3600 ft., 6.2.01.

50 (275). *HEMIXUS MACCLELLANDI* (Horsf.).

Oates, Faun. Brit. Ind., Birds, i. p. 265.

Ménétaung, 6000 ft., 24.1.02; Loi Kaw, 5000 ft., 5.4.02; Loi Maw, 6000 ft., 4.4.02.

*51. *HEMIXUS HOLTII* (Swinh.).

Loi Pang Naw, 6000 ft., April 1902.

This is the species, I think, separated by Mr. Hartert as a subspecies of *H. tickelli* under the name *H. tickelli*

binghami. It agrees fairly well with specimens of *H. holti* in the British Museum.

52 (277). *ALCURUS STRIATUS* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 266.

Salween-Mékong watershed, 7000 ft., 16.2.01.

53 (287). *XANTHIXUS FLAVESCENS* (Blyth).

Oates, Faun. Brit. Ind., Birds, i. p. 275.

Byinkyi, 5500 ft., 9.3.02; Loi Sali, Mawkmai State, 5000 ft., 5.1.01.

54 (292). *SPIZIXUS CANIFRONS* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 280.

Ménétaung, 6000 ft., 12.1.02.

55 (296). *IOLE VIRESCENS* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 284.

Foot of watershed between Möng Kyat and Möng Hang, 3500 ft., 6.2.01.

Family SITTIDÆ.

*56 (315). *SITTA HIMALAYENSIS* Jard. & Selby.

Oates, Faun. Brit. Ind., Birds, i. p. 300.

This species, so far as I know, has not previously been procured in Burma.

57 (318). *SITTA NAGAENSIS* Godw.-Aust.

Oates, Faun. Brit. Ind., Birds, i. p. 302.

Loi Un, Loi Sali range, 5600 ft., 7.1.01.

58 (319). *SITTA MAGNA* Wardl. Rams.

Oates, Faun. Brit. Ind., Birds, i. p. 303.

This bird does not seem to be rare at an elevation of 6000 ft. and upwards. Over a dozen specimens were obtained at various localities, from Ménétaung, in the Loilong State in the west, to the Mékong Valley on the eastern frontier of the Shan States.

*59 (324). *SITTA FORMOSA* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 306.

Salween-Mékong watershed, east of Möng Hang, 7000 ft., 16.2.01.

60 (325). *SITTA FRONTALIS* Horsf.

Oates, Faun. Brit. Ind., Birds, i. p. 307.

Loi Un, Loi Salii range, 5000 ft., 8.1.01.

Family DICRURIDÆ.

* 61 (339). *BHRINGA REMIFER* (Temm.).

Oates, Faun. Brit. Ind., Birds, i. p. 324.

Loi Un, Loi Salii range, 5000 ft., 8.1.01.

Smaller than typical *B. remifer*, with metallic-green, not violet, gloss.

Family CETHIIDÆ.

62 (344). *CERTHIA DISCOLOR* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 331.

Pang Paw, Mawkmai State, 4800 ft., 11.11.01; Loi Pang Naw, near Mékong, 7000 to 7500 ft., April 1902.

*63. *UROCICHLA REPTATA* Bingham.

Urocichla reptata Bingham, Bull. B. O. C. xiii. p. 55 (1903).

“♂. Entire upper plumage umber-brown, the posterior margins of the feathers of the head, back, rump, wing-coverts, and upper tail-coverts narrowly barred with black, giving a squamate appearance to the plumage; wings and tail pale brown, the primaries and secondaries edged with brighter umber-brown; lores, ear-coverts, and chin ashy grey; throat, breast, and flanks umber-brown, the feathers on the throat and upper breast rather indistinctly speckled with grey; middle of the abdomen dark bluish grey; vent and under tail-coverts umber-brown. Bill horny; legs and feet in life apparently fleshy brown.

“Length 4.5”, wing 1.8”, tail 1.5”, bill from gape 0.55”, tarsus 0.7”.”

♂. Loi Pang Naw, Mékong Valley, 8300 ft., April 1902. Shot in dwarf bamboo.

*64 (357). *PNOEPYGA PUSILLA* Hodgs.

Oates, Faun. Brit. Ind., Birds, i. p. 343.

Loi Un, Loi Salii range, 5000 ft., 11.1.01.

Family SYLVIIDÆ.

65 (414). *PHYLLOSCOPUS PULCHER* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, i. p. 407.

Ménétaung, 6000 ft., 7.1.02; Loi Pang Naw, 7000 ft.,
April 1902.

*66 (432). *CRYPTOLOPHA TEPHROCEPHALA* (Anderson).

Oates, Faun. Brit. Ind., Birds, i. p. 423.

Cheindaungkyi, Loi Maw, 5000 ft., 23.1.02.

Family LANIIDÆ.

67 (474). *LANIUS COLLURIOIDES* Less.

Oates, Faun. Brit. Ind., Birds, i. p. 462.

Thaton State, 4000 ft., 27.4.02.

*68 (477). *LANIUS TEPHRONOTUS* (Vigors).

Oates, Faun. Brit. Ind., Birds, i. p. 465.

Mong Hta, 2.2.01.

*69 (481). *LANIUS CRISTATUS* Linn.

Oates, Faun. Brit. Ind., Birds, i. p. 468.

Mawkmai State, 2000 ft., 8.12.01.

*70 (485). *HEMIPUS CAPITALIS* (McClelland).

Oates, Faun. Brit. Ind., Birds, i. p. 472.

Kaunghpo, Ménétaung, 6000 ft., 26.1.02.

*71 (491). *PERICROCOTUS FRATERCULUS* Swinh.

Oates, Faun. Brit. Ind., Birds, i. p. 481.

West of Pinlaung, Loilong State, 4000 ft., 23.2.02.

Family ORIOLIDÆ.

72 (515). *ORIOLOUS TENUIROSTRIS* Blyth.

Oates, Faun. Brit. Ind., Birds, i. p. 503.

♂. Loi Un, Loi Salii range, 5600 ft., 7.1.01.

This specimen has all the appearance of a hybrid between
O. indicus and *O. tenuirostris*.

73 (521). *ORIOLOUS MELANOCEPHALUS* Linn.

Oates, Faun. Brit. Ind., Birds, i. p. 506.

South of Honan, Mawkmai State, 4500 ft., 14.5.02.

74 (522). *ORIOLOUS TRAILLI* (Vigors).

Oates, Faun. Brit. Ind., Birds, i. p. 508.

Panghi, Loi Sali range, 4000 ft., Mawkmai State, 5.1.01.

Family *EULABETIDÆ*.

75 (524). *EULABES INTERMEDIA* (A. Hay).

Oates, Faun. Brit. Ind., Birds, i. p. 511.

Ménétaung, 6000 ft., 26.1.02.

Family *MUSCICAPIDÆ*.

76 (560). *SIPHIA STROPHIATA* Hodgs.

Oates, Faun. Brit. Ind., Birds, ii. p. 8.

Loi Pang Naw, 8000 to 9000 ft., near Mékong, April 1902; Loi Un, Loi Sali watershed, 5500 ft., 7.1.01; Ménétaung, 6000 ft., 25.1.02.

*77 (565). *CYORNIS HODGSONI* (Verr.).

Oates, Faun. Brit. Ind., Birds, ii. p. 14.

Loi Maw, 7000 ft., 6.4.02.

*78 (566). *CYORNIS HYPERYTHRUS* (Blyth).

Oates, Faun. Brit. Ind., Birds, ii. p. 15.

Loi Maw, 7000 ft., 6.4.02; Loi Pang Naw, 8000 ft., 1.4.02.

*79 (567). *CYORNIS LEUCOMELANURA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 16.

Kaungpho, Ménétaung, 5000 ft., 26.1.02.

80 (569). *CYORNIS MELANOLEUCUS* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 18.

Kaungpho, Ménétaung, 6000 ft., 25.1.02.

81 (571). *CYORNIS SAPPHIRA* (Tick.).

Oates, Faun. Brit. Ind., Birds, ii. p. 20.

Chendawgné, Ménétaung, 4500 ft., 23.1.02.

82 (572). *CYORNIS OATESI* Salvad.

Oates, Faun. Brit. Ind., Birds, ii. p. 20.

Byinkyi, 5500 ft., 9.3.02; Loi Maw, 7000 ft., 6.1.02; Ménétaung, 6500 ft., 26.1.02.

83 (575). *CYORNIS RUBECULOIDES* (Vigors).

Oates, Faun. Brit. Ind., Birds, ii. p. 23.

Loi Pang Naw, west of Mékong, 1.4.02.

84 (579). *STOPAROLA MELANOPS* (Vigors).

Oates, Faun. Brit. Ind., Birds, ii. p. 28.

Loi Maw, 4000 ft., 7.4.02.

85 (593). *NILTAVA GRANDIS* (Blyth).

Oates, Faun. Brit. Ind., Birds, ii. p. 40.

Ménétaung, 6000 ft., 21.1.02.

86 (594). *NILTAVA SUNDARA* Hodgs.

Oates, Faun. Brit. Ind., Birds, ii. p. 41.

Loi Maw, 6000 ft., 4.1.02.

87 (603). *CHELIDORHYNX HYPOXANTHUS* (Blyth).

Oates, Faun. Brit. Ind., Birds, ii. p. 51.

Loi Pang Naw, 7000 ft., April 1902.

Family TURDIDÆ.

88 (615). *OREICOLA FERREA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 66.

South of Homam, Mawkmai State, 4000 ft., 11.4.02.

89 (641). *RUTICILLA AUROREA* (Pall.).

Oates, Faun. Brit. Ind., Birds, ii. p. 93.

Loilong State, 5000 ft., 25.3.02.

*90 (654). *IANTHIA RUFILATA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 106.

Loi Sali range, 5500 ft., 5.1.01; Loi Pang Naw, 7000 ft.,
April 1902.

*91 (659). *NOTODELA LEUCURA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 112.

Taunggyi Crag, 5700 ft., June 1900.

92 (664). *CITTOCINCLA MACRURA* (Gm.).

Oates, Faun. Brit. Ind., Birds, ii. p. 118.

Loilong State, 2500 ft., 18.3.02.

- 93 (679). *MERULA PROTOMOMELÆNA* (Cab.).
Oates, Faun. Brit. Ind., Birds, ii. p. 133.
Bank of Mékong River, 2.2.01; Loi Maw, 5000 ft., 7.4.02.
- *94 (680). *MERULA OBSCURA* (Gm.).
Oates, Faun. Brit. Ind., Birds, ii. p. 134.
Loi Sali range, 5000 ft., 5.1.01.
- *95 (682). *MERULA FEE* Salvad.
Oates, Faun. Brit. Ind., Birds, ii. p. 135.
Loi Maw, 6000 ft., 5.4.02.
- 96 (690). *PETROPHILA ERYTHROGASTER* (Vigors).
Oates, Faun. Brit. Ind., Birds, ii. p. 143.
Salween-Namkha watershed, 5000 ft., Jan. 1902.
- 97 (693). *PETROPHILA CYANUS* (Linn.).
Oates, Faun. Brit. Ind., Birds, ii. p. 146.
Loi Un, Loi Sali range, 5500 ft., 7.6.01.
- 98 (695). *OREOCINCLA DAUMA* (Lath.).
Oates, Faun. Brit. Ind., Birds, ii. p. 152.
Linbooé, Mékong bank, Feb. 1901.
- *99 (705). *ZOOTHERA MARGINATA* Blyth.
Oates, Faun. Brit. Ind., Birds, ii. p. 157.
Ménétaung, 6000 ft., 20.1.02; Zawgyichaung, Ywangan State, 15.1.02.
- *100 (706). *COCHOA PURPUREA* Hodgs.
Oates, Faun. Brit. Ind., Birds, ii. p. 159.
Loi Maw, 7000 ft., April 1902.
- 101 (710). *CINCLUS PALLASI* Temm.
Oates, Faun. Brit. Ind., Birds, ii. p. 164.
Foot of Salween, Mékong watershed, 3000 ft., Dec. 1901.

Family PLOCEIDÆ.

- 102 (735). *UROLONCHA PUNCTULATA* (Linn.).
Oates, Faun. Brit. Ind., Birds, ii. p. 189.
Ménétaung, 4500 ft., 23.1.02; Wan Mah, Mawkmai, 3000 ft., 23.4.02.

Family FRINGILLIDÆ.

*103 (744). *MYCEROBAS MELANOXANTHUS* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 201.

Htitamaung, Loi Maw range, 6000 ft., 2.4.02.

104 (761). *CARPODACUS ERYTHRINUS* (Pall.).

Oates, Faun. Brit. Ind., Birds, ii. p. 219.

Ménétaung, 6000 ft., 26.1.02.

105 (797). *EMBERIZA AUREOLA* Pall.

Oates, Faun. Brit. Ind., Birds, ii. p. 259.

Pangkwa, Thaton State, 4000 ft., 27.1.02; Hpaimai, Mawkmai State, 4000 ft., 24.4.02.

106 (801). *EMBERIZA RUTILA* Pall.

Oates, Faun. Brit. Ind., Birds, ii. p. 263.

Loi Maw, near Mékong, 6000 ft., 4.4.02; Loi Un, Loi Sali range, 5500 ft., 7.1.01; Loilong State, 1000 ft., 20.3.03.

Family NECTARINIIDÆ.

107 (889). *ÆTHOPYGA DABRYI* (J. Verr.).

Oates, Faun. Brit. Ind., Birds, ii. p. 353.

Ménétaung, 6000 ft., 23.1.02.

108 (890). *ÆTHOPYGA SATURATA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 354.

Loi Un, Loi Sali range, 5600 ft., 6.1.01; Loi Maw, 4000 ft., 8.4.02.

*109 (891). *ÆTHOPYGA SANGUINEPECTUS* Wald.

Oates, Faun. Brit. Ind., Birds, ii. p. 354.

Pingué, Loilong State, 2000 ft., 22.3.02; Loi Maw, 6000 ft., 3.4.02.

*110 (892). *ÆTHOPYGA NEPALENSIS* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 355.

Loi Maw, 8000 ft., 6.4.02; Loi Pang Naw, west of Mékong, 8000 ft., April 1902.

111. (895). *ARACHNECTHRA ASIATICA* (Lath.).

Oates, Faun. Brit. Ind., Birds, ii. p. 359.

Hpaimai, Mawkmai State, 4000 ft., 24.4.02.

112 (906). *ARACHNOTHERA MAGNA* (Hodgs.).

Oates, Faun. Brit. Ind., Birds, ii. p. 369.

Panghi, Loi Sali range, 4000 ft., 5.1.01; Ménétaung, 5000 ft., 23.1.02.

Family *PITTIDÆ*.

*113 (926). *ANTHOCINCLA PHAYRII* Blyth.

Oates, Faun. Brit. Ind., Birds, ii. p. 387.

♂. Myitha chaung, Ywangan State, 1500 ft., 11.2.02.

*114 (928). *PITTA OATESI* Hume.

Oates, Faun. Brit. Ind., Birds, ii. p. 390.

♂. Yengyi Palaung, 5200 ft., Yatsawk State, 13.1.02.

*115 (935). *PITTA CUCULLATA* Hartl.

Oates, Faun. Brit. Ind., Birds, ii. p. 395.

Myitgné, Yatsawk State, April 1900.

Family *EURYLEMIDÆ*.

*116 (942). *SERILOPHUS LUNATUS* (Gould).

Blanford, Faun. Brit. Ind., Birds, iii. p. 9.

Karain chaung, Maw State, 4200 ft., 28.1.02.

*117 (944). *PSARISOMUS DALHOUSIE* (Jameson).

Blanford, Faun. Brit. Ind., Birds, iii. p. 11.

Locality not given, probably Yatsawk.

Family *PICIDÆ*.

*118 (951). *GECINUS CHLOROLOPHUS* (Vieill.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 23.

♂ ♀. Yatsawk, 2000 ft., 11.12.01.

*119 (955). *CHRYSOPHLEGA FLAVINUCHA* (Gould).

Blanford, Faun. Brit. Ind., Birds, iii. p. 28.

Maunghtoo, Thaton State, 3000 ft., 8.5.02.

*120 (959). *GECINULUS VIRIDIS* Blyth.

Blanford, Faun. Brit. Ind., Birds, iii. p. 31.

♀. Yatsawk, 2000 ft., 20.12.01.

121 (960). *HYPOPICUS HYPERYTHRUS* (Vigors).

Blanford, Faun. Brit. Ind., Birds, iii. p. 32.

♂ ♀. Kalaw, 15.2.02; Ménétaung, 6000 ft., 8.1.02.

*122 (962). *DENDROCOPUS CABANISI* (Malh.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 35.

♀. South of Homam, Mawkmai State, 4500 ft., 14.5.02;
♂. Kalaw, 4500 ft., 16.2.02; ♀. South of Bampon, 4000 ft.,
16.5.02.

*123 (966). *DENDROCOPUS PYRRHOTHORAX* (Godw.-Aust.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 38.

♂. Loi Maw, 6000 ft., 5.4.02.

124 (968). *DENDROCOPUS ATRATUS* (Blyth).

Blanford, Faun. Brit. Ind., Birds, iii. p. 40.

Loi Pang Naw, 7500 ft., April 1902; Taunggyi, 5500 ft.,
June 1902; Loi Un, Loi Sali, 5600 ft., 6.1.01; Ménétaung,
6000 ft., 27.1.02.

125 (975). *IYNGIPICUS CANICAPILLUS* (Blyth).

Blanford, Faun. Brit. Ind., Birds, iii. p. 46.

Loi Maw, 5000 ft., 5.4.02.

126 (978). *PYRRHOPICUS PYRRHOTIS* (Hodgs.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 50.

Loi Maw, 6000 ft., 4.4.02.

*127 (983). *MICROPTERNUS PHŒOCEPS* Blyth.

Blanford, Faun. Brit. Ind., Birds, iii. p. 55.

North-east forests, Yatsawk State, April 1900.

128 (988). *TIGA JAVANENSIS* (Ljungh).

Blanford, Faun. Brit. Ind., Birds, iii. p. 61.

♀. Hills east of Wanhat, Cis-Salween, Mawkmai, 1100 ft.,
4.1.01.

*129 (1001). *PICUMNUS INNOMINATUS* Burton.

Blanford, Faun. Brit. Ind., Birds, iii. p. 76.

Byinkyi, Loilong State, 5500 ft., 9.3.02.

*130 (1002). *SASIA OCHRACEA* Hodgs.

Blanford, Faun. Brit. Ind., Birds, iii. p. 77.

Paunglaung, Loilong State, 1000 ft., 26.2.02.

Family CAPITONIDÆ.

- 131 (1007). *MEGALĒMA VIRENS* (Bodd.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 86.
Ménétaung, 6000 ft., 25.1.02.
- 132 (1012). *CYANOPS ASIATICA* (Lath.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 92.
Yengyi Palaung, Yatsawk State, 5500 ft., 10.1.02.
- 133 (1018). *CYANOPS RAMSAYI* (Wald.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 97.
Loi Maw, 6000 ft., 3.1.02; Loi Pang Naw, 7500 ft., April
1902; Ménétaung, 6000 ft., 18.1.02.

Family MEROPIDÆ.

- 134 (1030). *MELITTOPHAGUS SWINHOU* (Hume).
Blanford, Faun. Brit. Ind., Birds, iii. p. 114.
Boyathat, foot of Taunggyi, 11.11.1900.

Family ALCEDINIDÆ.

- 135 (1044). *HALCYON SMYRNENSIS* (Linn.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 132.
Yatsawk, 3000 ft., April 1900.

Family CYPSELIDÆ.

- *136 (1071). *CYPSELUS PACIFICUS* (Lath.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 167.
Loi Un, Loi Sali range, 5700 ft., 7.1.1900.

Family CAPRIMULGIDÆ.

- *137 (1093). *CAPRIMULGUS MACRURUS* Horsf.
Blanford, Faun. Brit. Ind., Birds, iii. p. 188.
Thaton State, 2500 ft., 2.5.02.

Family PSITTACIDÆ.

- *138 (1138). *PALÆORNIS TORQUATUS* (Bodd.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 250.
Homam, Mawkmai, 4000 ft., 15.5.02.

139 (1150). *LORICULUS VERNALIS* (Sparrm.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 261.
West of Kazaw, Loilong State, 3000 ft., 4.3.02.

Family STRIGIDÆ.

140 (1152). *STRIX FLAMMEA* Linn.

Blanford, Faun. Brit. Ind., Birds, iii. p. 265.
Yatsawk, 1.1.1900.

Family ASTONIDÆ.

141 (1158). *SYRNIUM NIVICOLA* (Hodgs.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 273.
Taunggyi, 5500 ft., 7.7.00.

*142 (1178). *SCOPS BAKKAMÆNA* (Pennant).

Blanford, Faun. Brit. Ind., Birds, iii. p. 297.
Taunggyi, 4500 ft., April 1902.

143 (1183). *GLAUCIDIUM CUCULOIDES* (Vigors).

Blanford, Faun. Brit. Ind., Birds, iii. p. 305.
Yatsawk, 2000 ft., 11.12.1900; Naung Hton, Thaton
State, 3000 ft., 8.5.02.

*144 (1186). *GLAUCIDIUM BRODIEI* (Burton).

Blanford, Faun. Brit. Ind., Birds, iii. p. 307.
Loilong State, 3000 ft., 13.3.02.

Family FALCONIDÆ.

145 (1205). *AQUILA MACULATA* (Gm.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 340.
Wanhat, Cis-Salween, Mawkmai, 1400 ft., 3.1.02.

146 (1208). *HIERAËTUS PENNATUS* (Gm.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 344.
No precise locality.

147 (1217). *SPILORNIS CHEELA* (Lath.).

Blanford, Faun. Brit. Ind., Birds, iii. p. 357.
♀ & ♀ juv. Yatsawk, 11.11.1900.
Both specimens belong to the smaller Eastern form
S. rutherfordi Swinhoe.

- *148 (1227). *POLIOAËTUS HUMILIS* (Müller & Schleg.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 371.
Nam Lun, Möngpu State, 1500 ft., Feb. 1901.
- 149 (1247). *ACCIPITER NISUS* (Linn.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 402.
Ménétaung, 7000 ft., 27.1.02.
- *150 (1251). *BAZA LOPHOTES* (Temm.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 409.
Loi Pang Naw, 4000 ft., 4.1.02.
- 151 (1262). *ERYTHROPUS AMURENSIS* Gurney.
Blanford, Faun. Brit. Ind., Birds, iii. p. 424.
Mongpan, 3000 ft., 27.4.02.
- +152 (1265). *TINNUNCULUS ALAUDARIUS* (Gm.).
Blanford, Faun. Brit. Ind., Birds, iii. p. 428.
Ywangan State, 2000 ft., 3.2.02.

Family COLUMBIDÆ.

- *153 (1273). *OSMOTRERON PHAYRII* Blyth.
Blanford, Faun. Brit. Ind., Birds, iv. p. 8.
No locality given, except Shan States.
- 154 (1281). *TRERON NEPALENSIS* (Hodgs.).
Blanford, Faun. Brit. Ind., Birds, iv. p. 14.
Yatsawk, 3000 ft., April 1900.
- 155 (1291). *CHALCOPHAPS INDICA* (Linn.).
Blanford, Faun. Brit. Ind., Birds, iv. p. 26.
Byinkyi, Loilong State, 4500 ft., 9.3.02; Loi Pang Naw,
6000 ft., 3.4.02.
- 156 (1297). *DENDROTRERON HODGSONI* (Vigors).
Blanford, Faun. Brit. Ind., Birds, iv. p. 33.
Loi Maw, 6000 ft., 4.1.02; Loi Maung, Loilong State,
5500 ft., 26.3.02.
- *157 (1301). *ALSOCOMUS PULCHRICOLLIS* (Hodgs.).
Blanford, Faun. Brit. Ind., Birds, iv. p. 37.
♀. Loi Maw, 7200 ft., 6.4.02.

158 (1312). *MACROPYGIA TUSALIA* Hodgs.

Blanford, Faun. Brit. Ind., Birds, iv. p. 49.

Loi Un, Loi Salii range, 5600 ft., 6.1.02; Loi Maw, 6000 ft., 3.4.02.

Family PHASIANIDÆ.

159 (1352). *BAMBUSICOLA FYTCHII* Anders.

Blanford, Faun. Brit. Ind., Birds, iv. p. 110.

Ménétaung, 5000 ft., 23.1.02.

160 (1363). *ARBORICOLA RUFIGULARIS* Blyth.

Blanford, Faun. Brit. Ind., Birds, iv. p. 126.

Loi Un, Loi Salii range, 6000 ft., 3.1.01.

*161 (1367). *ARBORICOLA BRUNNEIPECTUS* Tick.

Blanford, Faun. Brit. Ind., Birds, iv. p. 128.

Loi Un, Loi Salii range, 4000 ft., 23.12.1900.

Family TURNICIDÆ.

162 (1382). *TURNIX PUGNAX* (Temm.).

Blanford, Faun. Brit. Ind., Birds, iv. p. 151.

Loi Maw, 6000 ft., 3.4.02.

Family RALLIDÆ.

*163 (1401). *AMAURORNIS PHÆNICURUS* (Penn.).

Blanford, Faun. Brit. Ind., Birds, iv. p. 173.

Ywangan State, 4000 ft., 31.1.02.

164 (1402). *GALLINULA CHLOROPUS* (Linn.).

Blanford, Faun. Brit. Ind., Birds, iv. p. 175.

Yatsawk, 3000 ft., April 1900.

XLIII.—*Notices of recent Ornithological Publications.*

[Continued from p. 431.]

107. *Arribalzaga on the Birds of Paraguay.*

[Apuntes criticos sobre las Aves del Paraguay descritas por el Señor A. de Winkelried Bertoni. Por Enrique Lynch Arribalzaga. An. Mus. Nac. Buenos Aires, vii.]

It appears that a young naturalist of Paraguay, Señor A. de Winkelried Bertoni, published at Asuncion in 1901, in a